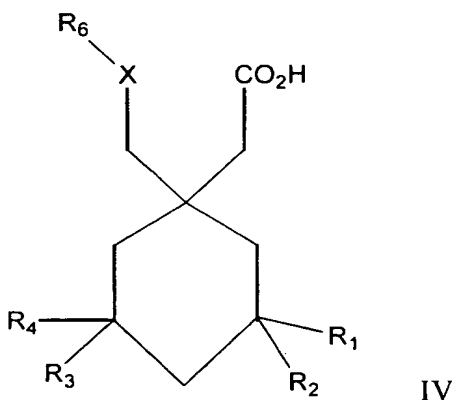


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CLAIMS

What is claimed is:

1. A compound of Formula IV



R_1 - R_4 are hydrogen or alkyl;

X is NR_5 or O ;

R_5 is hydrogen or alkyl,

R_6 is hydrogen, alkyl, benzyl, alkanoyl, alkoxyalkanoyl, arylalkyl, alkoxy, cycloalkyl, allyl, alkylcycloalkyl, alkoxy, cycloalkyl, alkylcycloalkyl, trisubstituted halogenalkyl, and wherein R_1 - R_4 are each hydrogen the R_6 is not hydrogen or methyl; or a pharmaceutically acceptable salt, ester, prodrug, or amide thereof.

2. A compound according to Claim 1 wherein R_2 and R_4 are hydrogen and R_1 and R_3 are alkyl; R_2 and R_4 are hydrogen and R_1 and R_3 are methyl; R_1 - R_4 are hydrogen; R_1 is alkyl and R_2 - R_4 are hydrogen; R_1 is methyl and R_2 - R_4 are hydrogen; R_5 is hydrogen; X is NR_6 ; X is O ; R_6 is alkyl; R_6 is benzyl; R_6 is acetyl; R_6 is phenylalkyl; R_6 is cycloalkyl; R_6 is trifluoroalkyl; R_6 is alkylcycloalkyl; R_6 is alkoxy; and R_6 is allyl.

3. A compound according to Claim 1 wherein R_2 and R_4 are hydrogen and R_1 and R_3 are methyl; R_1 - R_4 are hydrogen; R_1 is methyl and R_2 - R_4 are hydrogen; R_5 is

hydrogen; X is NR₆; R₆ is alkyl; R₆ is benzyl; R₆ is acetyl; R₆ is phenylalkyl; R₆ is cycloalkyl; R₆ is trifluoroalkyl; R₆ is alkylcycloalkyl; R₆ is alkoxy; and R₆ is allyl.

4. A compound according to Claim 1 wherein R₂ and R₄ are hydrogen and R₁ and R₃ are methyl; R₁-R₄ are hydrogen.

5. A compound according to Claim 1 and selected from the group consisting of:

(1-Allylaminomethyl-cyclohexyl)-acetic acid;
(1-Prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;
{1-[(2,2,2-Trifluoro-ethylamino)-methyl]-cyclohexyl}-acetic acid;
{1-[(3,3,3-Trifluoro-propylamino)-methyl]-cyclohexyl}-acetic acid;
1 α ,3 β ,5 β - (1-Allylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid;
1 α ,3 β ,5 β -(3,5-Dimethyl-1-prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;
1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(2,2,2-trifluoro-ethylamino)-methyl]-cyclohexyl}-
acetic acid;
1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(3,3,3-trifluoro-propylamino)-methyl]-cyclohexyl}-
acetic acid;
trans-((1R,3R)-1-Allylaminomethyl-3-methyl-cyclohexyl)-acetic acid;
trans-((1R,3R)-3-Methyl-1-prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;
trans-((1R,3R)-3-Methyl-1-[(2,2,2-trifluoro-ethylamino)-methyl]-cyclohexyl)-
acetic acid;
trans-((1R,3R)-3-Methyl-1-[(3,3,3-trifluoro-propylamino)-methyl]-cyclohexyl)-
acetic acid;
trans-((1R,3R)-3-Methyl-1-[(4,4,4-trifluoro-butylamino)-methyl]-cyclohexyl)-
acetic acid;
1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(4,4,4-trifluoro-butylamino)-methyl]-cyclohexyl}-
acetic acid;
1 α ,3 β ,5 β -{1-[(Cyclopropylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid;
trans-((1R,3R)-1-[(Cyclopropylmethyl-amino)-methyl]-3-methyl-cyclohexyl)-
acetic acid;

trans-((1R,3R)-3-Methyl-1-methylaminomethyl-cyclohexyl)-acetic acid;
trans-((1R,3R)-1-Ethylaminomethyl-3-methyl-cyclohexyl)-acetic acid;
trans-((1R,3R)-3-Methyl-1-propylaminomethyl-cyclohexyl)-acetic acid;
trans-((1R,3R)-1-Butylaminomethyl-3-methyl-cyclohexyl)-acetic acid;
trans-((1R,3R)-1-Hydroxymethyl-3-methyl-cyclohexyl)-acetic acid;
1 α ,3 β ,5 β -{1-[(Hydroxymethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid;
1 α ,3 β ,5 β -(1-Aminomethyl-3,5-diethyl-cyclohexyl)-acetic acid, hydrochloride;
1 α ,3 β ,5 β -(3,5-Dimethyl-1-propylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -(1-Ethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -(1-Benzylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -(1-Dimethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -(1-Butylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -{1-[(Benzyl-methyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid, hydrochloride salt;
1 α ,3 β ,5 β -(3,5-Dimethyl-1-methylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -[1-(Acetyl-amino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid;
1 α ,3 β ,5 β -[1-(Isobutylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -[3,5-Dimethyl-1-(phenethylamino-methyl)-cyclohexyl]-acetic acid,
hydrochloride salt;
1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(3-phenyl-propylamino)-methyl]-cyclohexyl}-acetic
acid, hydrochloride salt;
{1-[(Cyclobutylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;

1 $\alpha,3\beta,5\beta$ -[1-(Isopropylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;

{1-[(2-Methyl-butylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;

{1-[(4,4,4-Trifluoro-butylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;

(1-Ethylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;

{1-[(Cyclopropylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;

{1-[(2-Hydroxy-1-methyl-ethylamino)-methyl]-cyclohexyl}-acetic acid,
hydrochloride salt;

[1-(Isobutylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;

(1-Propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;

[1-(Isopropylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;

(1-Cyclohexylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;

[1-(Benzylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;

((1R,3R)-3-Methyl-1-propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride
salt;

{1-[Cyclopentylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloric
salt;

{1-[(Cyclohexylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloric
salt;

[1-(*tert*-Butoxycarbonylamino-methyl)-cyclohexyl]-acetic acid;

[1-(Acetyl-amino-methyl)-cyclohexyl]-acetic acid;

((3R, 5S)-1-Cyclobutylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

{(3R, 5S)-3,5-Dimethyl-1-[(2-methyl-butylamino)-methyl]-cyclohexyl}-acetic
acid, hydrochloride salt;

{(3R, 5S)-1-[(2-Hydroxy-1-methyl-ethylamino)-methyl]-3,5-dimethyl-
cyclohexyl}-acetic acid, hydrochloride salt;

{(3R, 5S)-1-[(2,2-Dimethoxy-ethylamino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid, hydrochloride salt;

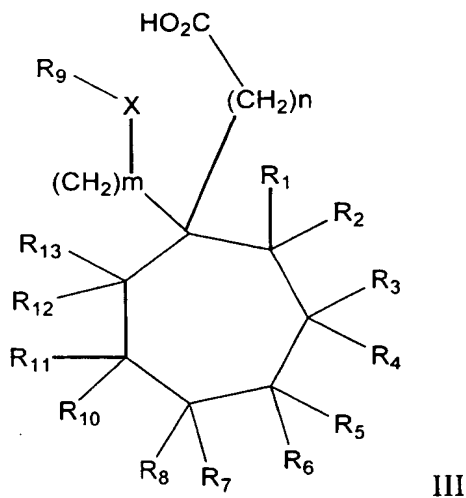
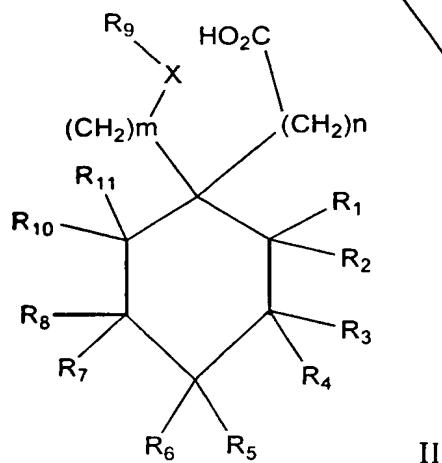
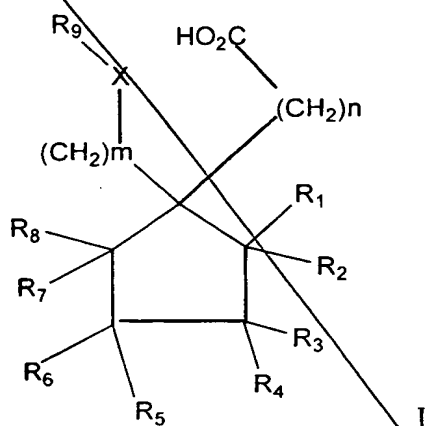
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{(3R, 5S)-1-[(Cyclopentylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid, hydrochloride salt;
{(3R,5S)-1-[(Cyclohexylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid, hydrochloride salt;
5 ((3R, 5S)-1-Cyclohexylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
((3R,5S)-1-Carboxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid;
trans-((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
10 *cis*-((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
(1-Dimethylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
(1-Butylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
15 {1-[2,2-Dimethoxy-ethylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;
(1-methylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
{1-[(Benzyl-methyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;
[1-(Phenethylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
20 {1-[(3-Phenyl-propylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;
((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid, sodium salt;
((3R, 5S)-1-Ethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
(1-Aminomethyl-4-ethyl-cyclohexyl)-acetic acid, hydrochloric salt;
(1-Aminomethyl-4-propyl-cyclohexyl)-acetic acid, hydrochloric salt;
25 ((3R, 5S)-3,5-Dimethyl-1-propylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
[(1R, 3R)-1-(Benzylamino-methyl)-3-methyl-cyclohexyl]-acetic acid,
hydrochloride salt;
{(1R, 3R)-1-[(Benzyl-methyl-amino)-methyl]-3-methyl-cyclohexyl}-acetic acid,
30 hydrochloride salt;
or
((1R, 3R)-3-Methyl-1-methylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

FOOTNOTES

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6. A method for treating diabetic retinopathy comprising the step of administering a therapeutically effective amount of a compound of Formulas I, II, and/or III to a patient in need thereof



wherein:

R₉ is H; alkyl; cycloalkyl; substituted alkyl containing halogen, amine, alkoxy, cycloalkyl, or hydroxy; allyl; alkynyl; alkanoyl; alkoxyalkanoyl; sulfonyl; phenyl; benzyl; or arylalkyl;

m and n are independently an integer of 1-3;

R₁ - R₈ and R₁₀ - R₁₄ are independently H, alkyl, or substituted alkyl; and

X = NR₁₄, O, or S

where there is more than one stereoisomer, each chiral center may be independently R or S; or a pharmaceutically acceptable salt, ester, prodrug, or amide thereof.

7. The method of Claim 6 wherein m and n are 1; X is NR₁₄; R₉ is H; R₄ is methyl; R₄ and R₅ are methyl; R₈ is methyl; R₁₀ is methyl; R₇ and R₈ are methyl; R₄ and R₈ are methyl; R₁-R₈ and R₁₀-R₁₃ are H; R₉ is alkyl; R₉ is benzyl; R₁₄ is alkyl; R₉ is arylalkyl; R₉ is cycloalkyl; R₁-R₈ are H; R₁-R₈ and R₁₀-R₁₁ are H; R₁-R₂ and R₇-R₈ are H; or R₂ is methyl.
8. The method of Claim 6 wherein R₃ is alkyl, R₁-R₂ and R₄-R₁₁ and R₁₄ are hydrogen, and m and n are 1, and X is NR₁₄; R₃ and R₁₁ are alkyl, R₁-R₂ and R₄-R₁₀ and R₁₄ are hydrogen, m and n are 1, and X is NR₁₄; R₃ and R₁₁ are alkyl, R₁-R₂ and R₄-R₁₀ and R₁₄ are hydrogen, m and n are 1, R₉ is alkyl, and X is NR₁₄; and R₁-R₁₁ and R₁₄ are hydrogen, m and n are 1, and X is O.
9. The method of Claim 6 wherein the compound is selected from the group consisting of:
- (1-Allylaminomethyl-cyclohexyl)-acetic acid;
- (1-Prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;
- {1-[(2,2,2-Trifluoro-ethylamino)-methyl]-cyclohexyl}-acetic acid;
- {1-[(3,3,3-Trifluoro-propylamino)-methyl]-cyclohexyl}-acetic acid;
- 1 α ,3 β ,5 β - (1-Allylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid;
- 1 α ,3 β ,5 β -(3,5-Dimethyl-1-prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;

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1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(2,2,2-trifluoro-ethylamino)-methyl]-cyclohexyl}-
acetic acid;

1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(3,3,3-trifluoro-propylamino)-methyl]-cyclohexyl}-
acetic acid;

trans-((1R,3R)-1-Allylaminomethyl-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-[(2,2,2-trifluoro-ethylamino)-methyl]-cyclohexyl)-
acetic acid;

trans-((1R,3R)-3-Methyl-1-[(3,3,3-trifluoro-propylamino)-methyl]-cyclohexyl)-acetic
acid;

trans-((1R,3R)-3-Methyl-1-[(4,4,4-trifluoro-butylamino)-methyl]-cyclohexyl)-
acetic acid;

1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(4,4,4-trifluoro-butylamino)-methyl]-cyclohexyl}-
acetic acid;

1 α ,3 β ,5 β -{1-[(Cyclopropylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid;

trans-((1R,3R)-1-[(Cyclopropylmethyl-amino)-methyl]-3-methyl-cyclohexyl)-
acetic acid;

trans-((1R,3R)-3-Methyl-1-methylaminomethyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-1-Ethylaminomethyl-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-propylaminomethyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-1-Butylaminomethyl-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-1-Hydroxymethyl-3-methyl-cyclohexyl)-acetic acid;

1 α ,3 β ,5 β -{1-[(Hydroxymethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid;

1 α ,3 β ,5 β -(1-Aminomethyl-3,5-diethyl-cyclohexyl)-acetic acid, hydrochloride;

trans-(1R,3R)(1-Aminomethyl-3-methyl-cyclohexyl)-acetic acid, hydrochloride;

(1-Aminomethyl-2-methyl-cyclohexyl)-acetic acid, hydrochloride;

(1-Aminomethyl-3,3-dimethyl-cyclohexyl)-acetic acid, hydrochloride;

(\pm)-(trans)-(1-Aminomethyl-3,4-dimethyl-cyclopentyl)-acetic acid, hydrochloride;

(cis/trans)-(3R)-(1-Aminomethyl-3-methyl-cyclopentyl)-acetic acid,
hydrochloride;

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(+)-(trans)-(1-Aminomethyl-3,4-dimethyl-cyclopentyl)-acetic acid, hydrochloride;

(+)-(trans)-(1-Aminomethyl-3,4-dimethyl-cyclopentyl)-acetic acid, hydrochloride;

1 α ,3 β ,5 β -(1-Aminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid, hydrochloride;

1 α ,3 β ,5 β -(3,5-Dimethyl-1-propylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Ethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Benzylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Dimethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Butylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -{1-[(Benzyl-methyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid, hydrochloride salt;

1 α ,3 β ,5 β -(3,5-Dimethyl-1-methylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -[1-(Acetyl-amino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid;

1 α ,3 β ,5 β -(1-(Isobutylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -[3,5-Dimethyl-1-(phenethylamino-methyl)-cyclohexyl]-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(3-phenyl-propylamino)-methyl]-cyclohexyl}-acetic
acid, hydrochloride salt;

{1-[(Cyclobutylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;

1 α ,3 β ,5 β -(1-(Isopropylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;

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1-Aminomethyl-1-cyclohexane-acetic acid;
1-Aminomethyl-1-cyclopentane-acetic acid;
1-Aminomethyl-1-cyclopentane-acetic acid, sodium salt;
1-(hydroxymethyl)cyclohexane-acetic acid, sodium salt;
5 {1-[(2-Methyl-butylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;
{1-[(4,4,4-Trifluoro-butylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;
(1-Ethylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
{1-[(Cyclopropylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
10 salt;
{1-[(2-Hydroxy-1-methyl-ethylamino)-methyl]-cyclohexyl}-acetic acid,
hydrochloride salt;
[1-(Isobutylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
(1-Propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
15 [1-(Isopropylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
(1-Cyclohexylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
[1-(Benzylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
((1R,3R)-3-Methyl-1-propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride
salt;
20 {1-[Cyclopentylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloric
salt;
{1-[(Cyclohexylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloric
salt;
[1-(*tert*-Butoxycarbonylamino-methyl)-cyclohexyl]-acetic acid;
25 [1-(Acetylamino-methyl)-cyclohexyl]-acetic acid;
((3R, 5S)-1-Cyclobutylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;
{(3R, 5S)-3,5-Dimethyl-1-[(2-methyl-butylamino)-methyl]-cyclohexyl}-acetic
acid, hydrochloride salt;
30 {(3R, 5S)-1-[(2-Hydroxy-1-methyl-ethylamino)-methyl]-3,5-dimethyl-
cyclohexyl}-acetic acid, hydrochloride salt;
{(3R, 5S)-1-[(2,2-Dimethoxy-ethylamino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid, hydrochloride salt;

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{(3R, 5S)-1-[(Cyclopentylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid, hydrochloride salt;

{(3R, 5S)-1-[(Cyclohexylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid, hydrochloride salt;

5 ((3R, 5S)-1-Cyclohexylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

((3R, 5S)-1-Carboxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid;

trans-((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

cis-((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

(1-Dimethylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;

(1-Butylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;

{1-[2,2-Dimethoxy-ethylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;

(1-methylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;

{1-[(Benzyl-methyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;

[1-(Phenethylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;

{1-[(3-Phenyl-propylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;

20 ((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid, sodium salt;

((3R, 5S)-1-Ethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

(1-Aminomethyl-4-ethyl-cyclohexyl)-acetic acid, hydrochloric salt;

(1-Aminomethyl-4-propyl-cyclohexyl)-acetic acid, hydrochloric salt;

25 ((3R, 5S)-3,5-Dimethyl-1-propylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

[(1R, 3R)-1-(Benzylamino-methyl)-3-methyl-cyclohexyl]-acetic acid,
hydrochloride salt;

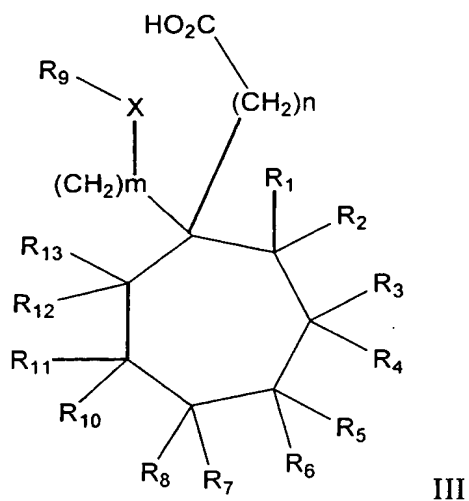
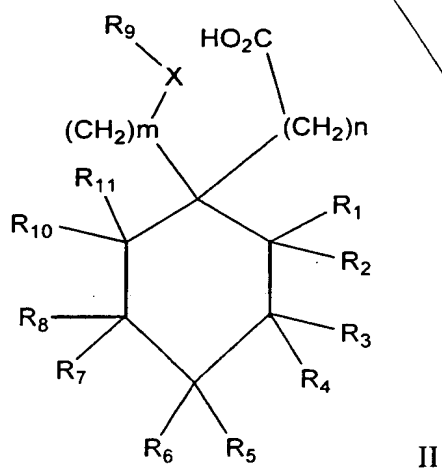
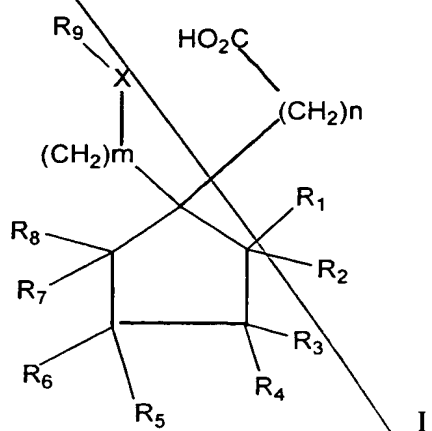
{(1R, 3R)-1-[(Benzyl-methyl-amino)-methyl]-3-methyl-cyclohexyl}-acetic acid,
hydrochloride salt;

or

30 ((1R, 3R)-3-Methyl-1-methylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

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10. A method for inhibiting the branch chain amino acid-dependent aminotransferase in a patient in need thereof comprising the step of administering a therapeutically effective amount of a compound of Formulas I, II, and/or III



wherein:

R₉ is H; alkyl; cycloalkyl; substituted alkyl containing halogen, amine, alkoxy, cycloalkyl, or hydroxy; allyl; alkynyl; alkanoyl; alkoxyalkanoyl; sulfonyl; phenyl; benzyl; or arylalkyl;

m and n are independently an integer of 1-3;

R₁ - R₈ and R₁₀ - R₁₄ are independently H, alkyl, or substituted alkyl; and

X = NR₁₄, O, or S

where there is more than one stereoisomer, each chiral center may be independently R or S; or a pharmaceutically acceptable salt, ester, prodrug, or amide thereof

11. The method of Claim 10 wherein wherein m and n are 1; X is NR₁₄; R₉ is H; R₄ is methyl; R₄ and R₅ are methyl; R₈ is methyl; R₁₀ is methyl; R₇ and R₈ are methyl; R₄ and R₈ are methyl; R₁-R₈ and R₁₀-R₁₃ are H; R₉ is alkyl; R₉ is benzyl; R₁₄ is alkyl; R₉ is arylalkyl; R₉ is cycloalkyl; R₁-R₈ are H; R₁-R₈ and R₁₀-R₁₁ are H; R₁-R₂ and R₇-R₈ are H; or R₂ is methyl.

12. The method of Claim 10 wherein R₃ is alkyl, R₁-R₂ and R₄-R₁₁ and R₁₄ are hydrogen, and m and n are 1, and X is NR₁₄; R₃ and R₁₁ are alkyl, R₁-R₂ and R₄-R₁₀ and R₁₄ are hydrogen, m and n are 1, and X is NR₁₄; R₃ and R₁₁ are alkyl, R₁-R₂ and R₄-R₁₀ and R₁₄ are hydrogen, m and n are 1, R₉ is alkyl, and X is NR₁₄; and R₁-R₁₁ and R₁₄ are hydrogen, m and n are 1, and X is O.

13. The method of Claim 10 wherein the compound is selected from:

(1-Allylaminomethyl-cyclohexyl)-acetic acid;

(1-Prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;

{1-[(2,2,2-Trifluoro-ethylamino)-methyl]-cyclohexyl}-acetic acid;

{1-[(3,3,3-Trifluoro-propylamino)-methyl]-cyclohexyl}-acetic acid;

1 α ,3 β ,5 β - (1-Allylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid;

1 α ,3 β ,5 β -(3,5-Dimethyl-1-prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;

1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(2,2,2-trifluoro-ethylamino)-methyl]-cyclohexyl}-acetic acid;

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1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(3,3,3-trifluoro-propylamino)-methyl]-cyclohexyl}-acetic acid;

trans-((1R,3R)-1-Allylaminomethyl-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-prop-2-ynylaminomethyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-[(2,2,2-trifluoro-ethylamino)-methyl]-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-[(3,3,3-trifluoro-propylamino)-methyl]-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-[(4,4,4-trifluoro-butylamino)-methyl]-cyclohexyl)-acetic acid;

1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(4,4,4-trifluoro-butylamino)-methyl]-cyclohexyl}-acetic acid;

1 α ,3 β ,5 β -{1-[(Cyclopropylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic acid;

trans-((1R,3R)-1-[(Cyclopropylmethyl-amino)-methyl]-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-methylaminomethyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-1-Ethylaminomethyl-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-3-Methyl-1-propylaminomethyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-1-Butylaminomethyl-3-methyl-cyclohexyl)-acetic acid;

trans-((1R,3R)-1-Hydroxymethyl-3-methyl-cyclohexyl)-acetic acid;

1 α ,3 β ,5 β -{1-[(Hydroxymethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic acid;

1 α ,3 β ,5 β -(1-Aminomethyl-3,5-diethyl-cyclohexyl)-acetic acid, hydrochloride;

trans-(1R,3R)(1-Aminomethyl-3-methyl-cyclohexyl)-acetic acid, hydrochloride;

(1-Aminomethyl-2-methyl-cyclohexyl)-acetic acid, hydrochloride;

(1-Aminomethyl-3,3-dimethyl-cyclohexyl)-acetic acid, hydrochloride;

(\pm)-(trans)-(1-Aminomethyl-3,4-dimethyl-cyclopentyl)-acetic acid, hydrochloride;

(cis/trans)-(3R)-(1-Aminomethyl-3-methyl-cyclopentyl)-acetic acid,

hydrochloride;

(+)-(trans)-(1-Aminomethyl-3,4-dimethyl-cyclopentyl)-acetic acid, hydrochloride;

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(+)-(trans)-(1-Aminomethyl-3,4-dimethyl-cyclopentyl)-acetic acid, hydrochloride;

1 α ,3 β ,5 β -(1-Aminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid, hydrochloride;

1 α ,3 β ,5 β -(3,5-Dimethyl-1-propylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Ethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Benzylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Dimethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -(1-Butylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -{1-[(Benzyl-methyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic
acid, hydrochloride salt;

1 α ,3 β ,5 β -(3,5-Dimethyl-1-methylaminomethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -[1-(Acetylamino-methyl)-3,5-dimethyl-cyclohexyl]-acetic acid;

1 α ,3 β ,5 β -(1-(Isobutylamino-methyl)-3,5-dimethyl-cyclohexyl)-acetic acid.
hydrochloride salt;

1 α ,3 β ,5 β -[3,5-Dimethyl-1-(phenethylamino-methyl)-cyclohexyl]-acetic acid,
hydrochloride salt;

1 α ,3 β ,5 β -{3,5-Dimethyl-1-[(3-phenyl-propylamino)-methyl]-cyclohexyl}-acetic
acid, hydrochloride salt;

{1-[(Cyclobutylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;

1 α ,3 β ,5 β -(1-(Isopropylamino-methyl)-3,5-dimethyl-cyclohexyl)-acetic acid,
hydrochloride salt;

1-Aminomethyl-1-cyclohexane-acetic acid;

1-Aminomethyl-1-cyclopentane-acetic acid;

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1-Aminomenthyl-1-cyclopentane-acetic acid, sodium salt;
1-(hydroxymethyl)cyclohexane-acetic acid, sodium salt;
{1-[(2-Methyl-butylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;
{1-[(4,4,4-Trifluoro-butylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
5 salt;
(1-Ethylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
{1-[(Cyclopropylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride
salt;
{1-[(2-Hydroxy-1-methyl-ethylamino)-methyl]-cyclohexyl}-acetic acid,
10 hydrochloride salt;
[1-(Isobutylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
(1-Propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
[1-(Isopropylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
(1-Cyclohexylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;
15 [1-(Benzylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;
((1R,3R)-3-Methyl-1-propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride
salt;
{1-[Cyclopentylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloric
salt;
20 {1-[(Cyclohexylmethyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloric
salt;
[1-(*tert*-Butoxycarbonylamino-methyl)-cyclohexyl]-acetic acid;
[1-(Acetylamino-methyl)-cyclohexyl]-acetic acid;
((3R, 5S)-1-Cyclobutylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid,
25 hydrochloride salt;
{(3R, 5S)-3,5-Dimethyl-1-[(2-methyl-butylamino)-methyl]-cyclohexyl}-acetic
acid, hydrochloride salt;
{(3R, 5S)-1-[(2-Hydroxy-1-methyl-ethylamino)-methyl]-3,5-dimethyl-
cyclohexyl}-acetic acid, hydrochloride salt;
30 {(3R, 5S)-1-[(2,2-Dimethoxy-ethylamino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid, hydrochloride salt;
{(3R, 5S)-1-[(Cyclopentylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-
acetic acid, hydrochloride salt;

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~~{{(3R,5S)-1-[(Cyclohexylmethyl-amino)-methyl]-3,5-dimethyl-cyclohexyl}-acetic acid, hydrochloride salt;~~

~~((3R, 5S)-1-Cyclohexylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

~~((3R,5S)-1-Carboxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid;~~

~~*trans*-((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

~~*cis*-((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

10 ~~(1-Dimethylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

~~(1-Butylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

~~{1-[2,2-Dimethoxy-ethylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;~~

~~(1-methylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

15 ~~{1-[(Benzyl-methyl-amino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;~~

~~[1-(Phenethylamino-methyl)-cyclohexyl]-acetic acid, hydrochloride salt;~~

~~{1-[(3-Phenyl-propylamino)-methyl]-cyclohexyl}-acetic acid, hydrochloride salt;~~

~~((3R, 5S)-1-Hydroxymethyl-3,5-dimethyl-cyclohexyl)-acetic acid, sodium salt;~~

~~((3R, 5S)-1-Ethylaminomethyl-3,5-dimethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

~~(1-Aminomethyl-4-ethyl-cyclohexyl)-acetic acid, hydrochloric salt;~~

~~(1-Aminomethyl-4-propyl-cyclohexyl)-acetic acid, hydrochloric salt;~~

~~((3R, 5S)-3,5-Dimethyl-1-propylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

25 ~~[(1R, 3R)-1-(Benzylamino-methyl)-3-methyl-cyclohexyl]-acetic acid, hydrochloride salt;~~

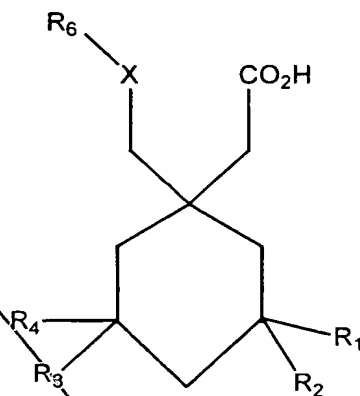
~~{(1R, 3R)-1-[(Benzyl-methyl-amino)-methyl]-3-methyl-cyclohexyl}-acetic acid, hydrochloride salt;~~

~~or~~

30 ~~((1R, 3R)-3-Methyl-1-methylaminomethyl-cyclohexyl)-acetic acid, hydrochloride salt;~~

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14. A method for treating neurological disorders, depression, anxiety, panic, mania, bipolar disorders, antiinflammatory diseases, glaucoma, pain or gastrointestinal damage comprising the step of administering a therapeutically effective amount of a compound of Formula IV to patient in need thereof.



IV

R1-R4 are hydrogen or alkyl;

X is NR5 or O;

R5 is hydrogen or alkyl,

R6 is hydrogen, alkyl, benzyl, alkanoyl, alkoxyalkanoyl, arylalkyl, alkoxy, cycloalkyl, alkyl, alkylcycloalkyl, alkoxy, cycloalkyl, alkylcycloalkyl, trisubstituted halogenalkyl, and wherein R1-R4 are each hydrogen the R6 is not hydrogen or methyl; or a pharmaceutically acceptable salt, ester, prodrug, or amide thereof.

Sub
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FOOTNOTES

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